REPORT

OF THE

DEPARTMENT OF HEALTH

OF THE

PANAMA CANAL

FOR THE

MONTH OF APRIL, 1916.

E. É. PERSONS

Major, Medical Corps, United States Army, Acting Chief Health Officer, Balbos Heights, Canal Zons

Gift of the Panama Canal Museum

WASHINGTON 1916



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LETTER OF TRANSMITTAL.

THE PANAMA CANAL, CANAL ZONE,
HEALTH DEPARTMENT,
Balboa Heights, May 16, 1916.

Maj. Gen. Geo. W. Goethals, Governor The Panama Canal, Balboa Heights, Canal Zone.

SIR: I have the honor to submit the following report of the operations of the Department of Health for the month of April, 1916.

Very respectfully,

E. E. Persons, Acting Chief Health Officer.

GENERAL REMARKS.

No cases of yellow fever, smallpox, or plague originated on or were brought to the Isthmus during the month.

VITAL STATISTICS.

The health of the employees remained good during the month. The number of names on the rolls for the preceding month was 33.656.

The total number of admissions to hospitals and quarters was 586, a rate of 207.70 per thousand, as compared with 290.53 per thousand for the preceding month, and 282.02 per thousand for the corresponding month of last year.

The total number of deaths from all causes was 23, of these 18 died from disease, or 6.38 per thousand, as compared with 5.80 for the preceding month, and 1.76 for the corresponding month of last year.

The constantly noneffective rate was 9.81, compared with 10.77 for the preceding month, and 9.85 for the corresponding month of last year.

The total admission rate for malaria, hospitals, and quarters, was 7.80, compared with 6.89 for last month, and 28.48 for the corresponding period of last year; and the total noneffective rate 0.26, compared with 0.35 for last month, and 0.95 for April, 1915.

The five diseases causing the highest admission rates in the order of their numerical importance were: Venereal diseases, diseases of the digestive system, diseases of the respiratory system, diseases of the nervous system, and nonvenereal diseases of the genito-urinary system. These five classes of diseases caused 40 per cent of all admissions to hospitals. Six per cent of all admissions to hospitals was caused by malaria.

The admission rate for typhoid fever was 1.77, compared with 0.36 for last month, and 0.35 for the corresponding period of last

year.

EFFECTS OF RACE.

The admission rate to hospital and the death rate for disease for black employees were 60.40 and 6.99 per thousand, as compared with 96.44 and 0.82 for the corresponding period of last year; for white employees 221.89 and 2.58, as compared with 240.84 and 7.37 for the month of April last year.

The admission rate to hospitals and quarters for malaria was 5.34 per thousand for blacks and 23.22 for whites, compared with 24.62 per thousand for blacks and 51.61 for whites for the corresponding

month of last year.

The death rate for Americans was 5.62, and the admission rate to hospitals for disease was 202.22, as compared with 5.64 and 211.52

for April, 1915.

Following is a table giving ages of all male gold employees of the Panama Canal and the Panama Railroad Co., as shown by annual physical examination, November 20, 1915:

DEPORTATIONS.

Age (years)	Number of em- ployees.	Age (years).	Number of em- ployees.
3	7	45	10
	8	46	7
3	17	47	4
)	29	49	1
[27	50	3
2	46	51	4
3	58	52	
	74 108	53	
3	125	55	
7	149	56	1
3	147	57	
)	173	58	1
)	190	59	
l 2	163 ′ 158	60	
Š	157	62	
	131	63	
5	169	64	
3	129	65	
7	141 147	67	
9	151	70	
)	130	72	1 3400
	98	76	
2	95		
3	113	Total employees exam-	2 5
4	96	ined	3, 5

Nine employees were deported during the month; for disease 8, and for injury 1. Three nonemployees were deported, all for disease.

CANAL ZONE.

The population of the Canal Zone is 32,905, among whom there was a total of 25 deaths; of these 22 deaths were from disease, giving a rate of 8.02 per thousand, as compared with 9.28 for the preceding month, and 5.71 for the corresponding month of last year. Of the total deaths from disease, the percentage under five years of age was 32, as compared with 27 for last month.

There were 40 births reported, giving a rate of 14.59. Of these 7 were of white and 33 of colored children. There were 5 deaths of children under one year of age, all colored, giving an infant mortality of 0.00 for white and 152 for colored children, with a general average of 125. The percentage of stillbirths to total births was 5 per cent.

PANAMA CITY.

The population of the city is 60,778, among whom there was a total of 129 deaths; of these 124 deaths were from disease, giving a percentage of 24.48 per thousand, as compared with 23.29 for the preceding month, and 25.44 for the corresponding period of last

Of the total deaths from disease the percentage under 5 years of age was 41 per cent, compared with 40 for last month.

The principal causes of deaths showing an increase as compared with March were: Tuberculosis of the lungs 24, compared with 23 for the preceding month; diarrhea and enteritis 19, compared with 12 for last month; and cerebral hemorrhage 5, as compared with 2 for the month of March.

The percentage of stillbirths to total births was 11 per cent.

COLON.

The population of the city is 24,693, among whom there were 60 deaths; of these 55 deaths were from disease, giving a rate of 26.73 per thousand, as compared with 18.95 for the preceding month, and 19.64 for the corresponding month of last year. Of the total deaths from disease the percentage under 5 years of age was 44 per cent, as compared with 33 for last month.

The principal causes of deaths showing an increase as compared with March were: Broncho-pneumonia 7, compared with 4 for the preceding month; diarrhea and enteritis 6, compared with 1 for last month; and cerebral hemorrhage 3, as compared with 1 for the

month of March.

There were 54 births reported, giving a rate of 26.24 per thousand. The infant mortality was 277 per thousand. The percentage of stillbirths to total births was 11 per cent.

HOSPITAL DIVISION.

ANCON HOSPITAL.

During the month the average number of patients constantly in hospital was 743. The per capita cost of patients in hospital proper was \$1.92 gross, and \$0.87 net. The net per capita cost of patients in the insane asylum was \$0.49 per day.

BOARD OF HEALTH LABORATORY.

The following work, in addition to routine, has been accomplished

during the month:

The results of the investigation into the corrosion of metals indicate very clearly that cast brass, sheet brass, copper, and lead are corroded by dilute solutions of bleaching powder, acetic, nitric, and hydrochloric acids. These acids and bleaching powder are used extensively in the hospital and eventually find their way into the waste pipes of plumbing fixtures. The corrosion was more marked when the metals were only partially submerged, and also when they were submerged intermittently with intervening opportunities for drying. Under these conditions, the metal showing the most pronounced degree of corrosion was lead.

Preliminary steps have been taken in the preparation of colloid-

gold solutions for use in the diagnosis of paresis.

INSANE DEPARTMENT.

During the month there were 13 admissions, 10 discharges, and 5 deaths. Included in these figures are 3 retransfers from Ancon Hospital, and 2 transfers to Ancon Hospital for surgical treatment. There were two deportations to the United States and one to the Philippines.

Authority for an additional medical officer trained in psychiatry has been granted. One has been selected from the staff of the Government Hospital for the Insane, and will report for duty dur-

ing the month of May.

The general health of the patients and cripples remains good. The small mouth milk pails for use in the dairy have arrived and have aided greatly in the improvement of the milk. At present the bacterial count runs between 2,000 and 3,000 per c. c., which would be considered unusually good milk anywhere.

The carpenter shop has been completed, the construction of the compost pit is well under way, and the work on the grounds is

progressing rapidly.

CHRONIC WARD.

There were 31.20 chronic and incurable patients constantly cared for during the month. The cost per patient per day was \$0.22. Detailed statistics are shown in Table XIII.

COLON HOSPITAL.

The average number of employees constantly sick was 17.96. The average number of days treatment per employee was 9.08. The per capita cost of patients was \$3.34 gross and \$2.50 net.

Detailed statistics are shown in Table XIV.

PALO SECO LEPER ASYLUM.

The number of patients under treatment at the end of the month was 57. There were no admissions, deaths, or discharges during the month.

Detailed statistics are shown in Table XV.

SANTO TOMAS HOSPITAL.

During the month a total of 1,205 patients were treated, 95 less than the preceding month. The daily average number of patients in the hospital was 426 as compared with 445 for March, and the total number of days treatment was 12,794 as compared with 13,803 for the preceding month. A total of 69 deaths occurred, with tuberculosis of the lungs, congenital debility, and pneumonia, the chief causes in the order named.

Detailed statistics are shown in Table XVI.

DISTRICT DISPENSARIES.

The dispensary having the highest admission rate for malaria was Pedro Miguel with a percentage of 0.05. No malaria cases were reported from the following districts: Ancon, Culebra-Empire, and Gatum.

SANITATION.

CANAL ZONE.

The following communicable diseases were reported during the month:

Typhoid fever	7 Tuberculosis	6
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PANAMA.

During the month the work of cementing tree cavities was undertaken, as this has been recognized as an important antimosquito measure, but had not been undertaken before in Panama City.

In the city 1,611 trees were treated, plugging such cavities as might become "containers" on account of holding water. A cement and sand mixture of 1-4 was used to close the cavities. Where large holes were found pieces of rock were used to fill in, reducing amount of cement needed. Count was kept on about

1,000 trees to determine the number of cavities per tree which during the rainy season would act as water containers with consequent mosquito breeding. An average of 2.55 holes per tree was found, and using this figure for total number of trees treated, we find that 4,108 possible containers were eliminated. The large trees presented the greater number of cavities, naturally, and decayed places where limbs had been broken off, and in the angles formed by branching were to be found the most frequent sites. As many as 22 cavities were found in one tree requiring filling.

It is interesting to report that quite a number of the cavities found, even at this season of very little rain, contained mosquito larvæ, and larva from several of these were identified later as st gomyia. Stegomyia were only found, however, in trees quite close to houses. The following infectious diseases were reported during the month:

 Tuberculosis, pulmonary.
 31
 Mumps.
 1

 Tuberculosis, other forms.
 2
 Chicken pox.
 11

 Diphtheria.
 4
 Leprosy.
 1

 Pellegra.
 1
 Measles.
 2

 Syphilis.
 3
 Typhoid fever.
 3

 Whooping cough.
 1
 3

COLON.

A concrete compost pit, with a capacity of 100 cubic yards for "curing" manure prior to use by local gardeners and farmers, has been erected at the municipal dump. It is believed that this pit will prove an important addition to the sanitary armamentarium

in preventing fly breeding.

An arrangement has been effected with the alcalde of Colon whereby we hope to eliminate the dog nuisance in the city. The Health Department furnishes two silver employees as dog catchers and the municipal authorities furnish a policeman. The measure is directed particularly against the unlicensed dogs. After apprehension the dogs are held for 24 hours at the city dump awaiting the claim of their owners; but if not reclaimed by the payment of a redemption fee they are killed. Since the beginning of the month we have caught 178 dogs; of these only 22 have been reclaimed.

The following infectious diseases were reported during the month:

Malaria	3	Tuberculosis Paratyphoid fever Pneumonia	1
---------	---	--	---

QUARANTINE SERVICE.

Reports of conditions on the west coast of South America are not reassuring. The yellow fever situation in Buenaventura and Guayaquil has shown no improvement during the month. An increase in the number of plague cases at several ports is noted this increase being very generally distributed.

TABLE I.—ADMISSIONS, DEATHS, AND NONEFFECTIVE RATES FOR EMPLOYEES; DEATHS OF RESIDENTS OF PANAMA, COLON, AND THE CANAL ZONE.

ABSOLUTE NUMBERS.

		ABSOL	UTE N	UMBEI	ks.				
	loyees.1	Admissions to hospitals:				Deaths	Noneffec- tive from sickness.		
	Number of employees. ¹	Total.	Disease.	External causes.	Total.	Disease.	External causes.	Days treated.	Constantly noneffective.
A pril, 1916.									
White	4,651 29,205	99 210		13 63	3 20	1 17	2 3	2,551 7,409	85. 02 246. 98
Total	. 33, 856	309	233	76	23	18	5	9,960	332.00
March, 1916.									
WhiteColored	4, 514 28, 570	116 301	95 195	21 106	4 16	$\begin{array}{c} 4 \\ 12 \end{array}$	4		91.68 264.44
Total	33,084	417	290	127	20	16	4	11,040	356. 12
A pril, 1915.									
White	4, 883 29, 242	128 329	98 235	30 94	4 4	3 2	1 2	2,561 7,523	85.37 250.77
. Total	34, 125	457	333	124	8	5	3	10,084	336. 14
	PR	OPORTIC	ONATE	Numb	ERS.2				-
A pril, 1916.									
White Colored	4, 651 29, 205	255. 43 86. 29	221. 89 60. 40	33. 54 25. 89	7. 74 8. 22	2. 58 6. 99	5.16 1.23		18. 29 7. 29
Total	33,856	109.52	82.58	26.94	8.15	6.38	1.77		9.81
March, 1916.									
White Colored	4,514 28,570		254.80 81.90	56.33 44.53	10. 63 6. 72	10. 63 5. 04	1.68		20.31 9.26
Total	. 33,084	151. 25	105. 19	46.06	7.25	5.80	1.45		10.77
A pril, 1915.									
White Colored	4,883 29,242	314.56 135.01	240. 84 96. 44	73. 72 38. 57	9.83 1.64	7.37 .82	2.46 .82		17. 49 8. 57
Total	34, 125	160.70	117. 10	43.60	2.81	1.76	1.05		9.85

 $^{^{\}rm L}$ Number of employees is based on the number of names appearing on the pay rolls for the month of April, to which is added the number of employees of contractors engaged in work for the Panama Canal, who have hospital privileges. 2 Annual a erage per thousand.

TABLE I.—DEATHS OF RESIDENTS OF THE CITIES OF PANAMA, COLON, AND THE CANAL ZONE—Continued.

		Deaths.	~	Annual average per 1,000.			
Place.	Popula- tion.	Total.	Dis- ease.	Ex- ternal causes.	Total.	Dis- ease.	Ex- ternal causes.
A pril, 1916.							
PanamaColonCanal Zone	60,778 24,693 32,905	129 60 25	124 55 22	5 5 3	25. 47 29. 16 9. 12	24. 48 26. 73 8. 02	0.99 2.43 1.10
Total	118, 376	214	201	13	21.69	20.37	1.32
Panama Colon Canal Zone	60,778 24,693 32,336	120 43 29	118 39 25	2 4 4	23. 69 20. 89 10. 76	23. 29 18. 95 9. 28	. 40 1. 94 1. 48
Total	117, 807	192	182	10	19.56	18.54	1.02
PanamaColonCanal Zone	60,373 29,331 33,652	133 54 18	128 48 16	5 6 2	26. 43 22. 09 6. 42	25. 44 19. 64 5. 71	. 99 2. 45 . 71
Total	123, 356	205	192	13	19.13	17.87	1.26

TABLE II.-DEATHS BY AGE, COLOR, AND SEX.

	White.		(Colored.			Yellow.			Totals.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Under I year 1 to 4 years 5 to 10 years 11 to 20 years 21 to 30 years 31 to 40 years 41 to 50 years 51 to 60 years 61 to 70 years 71 to 80 years 100 to 105 years Not stated	6 4 3 2 1 1		7 7 6 3 3 2 3	20 13 2 7 22 10 11 6 1	29 6 2 6 11 12 10 5	49 19 4 13 33 22 21 11 1 1	2 2 1		2 2 1	24 19 2 7 26 15 15 7 2 1	32 7 2 6 13 12 11 5 1 3	56 26 4 13 39 27 26 12 3 4
Total	21	10	31	96	82	178	5		5	122	92	214

TABLE III.—DEATHS BY NATIONALITY.

Nations.	Em- ployees.	Nonem- ployees.	Total.
Antigua Barbados British Honduras Chile Chile China Colombia Demarara Greece Grenada Guadeloupe India Italy Jamaica Montserrat Martinique Mexico Nassau Panama Peru St. Lucia St. Thomas St. Vincent Spain Trinidad United States Venezuela	13 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 38 1 1 5 9 3 1 1 2 44 1 1 2 2 44 1 1 2 1 1 2 1 1 1 2 1 1 1 1	5
Unknown	23	191	21

TABLE IV.—DEATH RATE AMONG AMERICANS ON THE ISTHMUS CONNECTED WITH THE PANAMA CANAL.

	Number of deaths.	Annual average per 1,000.
White employees from the United States (4,273): Disease. External causes.	0 2	5. 62
All causes	2	5.62
White women and children from the United States (3,535): Disease. External causes.	0	
All causes	0	
White employees and their families from the United States (7,308): Disease. External causes.	0 2	3.07
All causes	2	3.07
Total number of Americans on the Canal Zone (including soldiers) (14,698): Disease. External causes.	1 2	. 82
All causes.	3	2.45

TABLE V.—CAUSES OF DEATHS OF EMPLOYEES OF THE PANAMA CANAL AND PANAMA RAILROAD CO.

Causes of death.	White.	Colored.	Total.
Disease.			
Lobar pneumonia. Bright's disease (chronic nephritis). Softening of the brain Pyelitis.		- 6	
Bright's disease (chronic nephritis)		1	
Pyelitis		1	
Cerebral hemorrhage Organic disease of the heart	1	2	
Organic disease of the heart		1	
Гурhoid fever Disseminated tuberculosis		i	
Carbuncle of the back		1	
Uremia Fuberculosis of the lungs		1	
		•	
External causes.			
Drowning, accidental	1	2	
Drowning, accidental Railroad traumatism, accidental Fraumatism by fall		1	
Praumatism by fall	1	•••••	
Total	3	20	

TABLE VI.—CAUSES OF DEATHS OF CIVIL POPULATION (EMPLOY-EES AND NONEMPLOYEES) AND MILITARY AND PLACES WHERE CHARGEABLE.

Disease.	Pan- ama.	Colon.	Canal Zone.	Total.
General diseases.				
Typhoid fever	1			1
Malarial fever, estivo-autumnal	1	1		j
Measles.	1	1		1
Whooping cough Pyemia	1	1		
Septicemia	i	2		
Pellagra	3		1	
Beriberi	1			
Cuberculosis of the lungs	24	5	1	30
Puberculous meningitis	1	2		
Syphilis, tertiary	1	2		
Avphilis, hereditary	2	1		
yphilis, period not stated	1			
Cancer and other malignant tumors of the peri-				
toneum, intestines, rectum				
Cancer and other malignant tumors of breast Cancer and other malignant tumors of other or-	1			
gans and of organs not specified		1		
Acute articular rheumatism	1			
Anemia, primary, pernicious		1		
Anemia, secondary, cause not specified Alcoholism, chronic		1		
Alcoholism, chronic	1			
Diseases of the nervous system and of the organs of special sense.		5		
Simple meningitis	1			
Other diseases of the spinel and	1			
Cerebral hemorrhage, apoplexy	2	3	2	
Softening of the brain			1	
Serebral hemorrhage, apoplexy Softening of the brain Other forms of mental alienation. Epilepsy	1	1		
spitepsy		1		
Diseases of the circulatory system.				
Acute endocarditis	1			
Malignant endocarditis	1			
Organic diseases of the heart	6	2	1	
Arteriosclerosis	3			
Diseases of the lymphatic system	1			
Diseases of the respiratory system.				
Acute bronchitis	3	2	1	
Chronic bronchitis		2		
Broncho-pneumonia	6	7	4	1
Broncho-pneumonia neumonia (unqualified) obar pneumonia	2			
obar pneumonia	3	3	3	
Abscess of lungs			1	
Diseases of the digestive system.			1	
Diseases of the esophagus	1			
Thurstin anatuitin		1		
Chronic gastritis		1		
Diarrhea and enteritis (under 2 years)	19	6	1	
Diarrhea and enteritis (under 2 years)	1	6	1	
Chronic gastritis. Diarrhea and enteritis (under 2 years)	1	6	1	26

TABLE VI.—CAUSES OF DEATHS OF CIVIL POPULATION (EMPLOY-EES AND NONEMPLOYEES) AND MILITARY AND PLACES WHERE CHARGEABLE—Continued.

Disease.	Pan- ama.	Colon.	Canal Zone.	Total.
Nonvenereal diseases of the genito-urinary system and annexa.				
Acute nephritis. Bright's disease (chronic nephritis). Other diseases of the kidneys and annexa.	1 5	$\begin{array}{c}1\\2\\1\end{array}$	3	10 1
Pyelo-nephrosis. Cystitis Salpingitis and other diseases of the female gen- ital organs.	2 1	1	1	1 3
The puerperal state.				
Other accidents of labor Puerperal albuminuria and convulsions		1		1
Diseases of the skin and of the cellular tissue.				
Carbuncle	1			1
Diseases of the bones and of the organs of locomotion.				
Osteomyelitis	1			1
Malformations.				
Congenital malformations (stillbirth not included)	1			1
Diseases of early infancy.				
Newborn child Premature birth Congenital debility Malnutrition			2	1 5 2 5
Other causes peculiar to early infancy (including various consequences of labor)	1			1
A ffections produced by external causes.				
Suicide by poisoning		i		1
Other acute poisonings Burns (conflagration excepted) Accidental drowning Traumatism by fall	1 1		1	1 1 3
Traumatism by fall. Traumatism by other crushings Railroad traumatism. Homicide by firearms.			1	3 2 1 2
		1		1
Ill-defined diseases.				
Cause of death not specified or ill defined		3		6
Total	129 14	60	25	214 22
Grand total	143	66	27	236

DEATHS OF NONRESIDENTS.1

Residence.	National- ity.	Color.	Sex.	Age.	Diagnosis.
Interior of Panama.	Panaman.	Black	Female.	52	Mitral insufficiency.
Do	do	do	Male	18	Fever, undetermined.
Do	Chinese	Yellow	do	65	Cirrhosis of liver.
Do				80	Lobar pneumonia.
Do	do	White	do	49	Intestinal obstruc-
Steamship Kiyo Maru (passenger)	Chinese	Yellow	do	45.	Pulmonary tubercu- losis.
New York State		White	do	55	Angina pectoris.
Lima, Peru				62	Pulmonary tubercu- losis.
Interior of Panama.	Panaman.	Black	do	17	Cerebral tumor.

 $^{^{1}}$ Deaths of nonresidents are not included in the statistical charts relating to the cities of Panama and Colon or of the Canal Zone.

⁴⁴⁹²⁴⁻¹⁶⁻⁻⁻³

					And	on I	Hosp	ital.				
		F	Empl	oyee	s.			No	nem	ploy	ees.	
	Adr	nissi	ions.	D	eath	ıs.	Adr	nissi	ons.	D	eath	ıs.
Diseases.	Wh	ite.		Wh	ite.		Wh	ite.		Wh	ite.	1
	Americans.	Europeans.	łk.	Americans.	Europeans.	بند	iers.	ers.	ĸ.	iers.	ers.	F.
	Аше	Eur	Black.	Ате	Eur	Black.	Soldiers	Others.	Black.	Soldiers	Others.	Black
General diseases.												
l'yphoid fever Relapsing fever Malarial fever, estivoautum-			1					1				
			5						1			-
Malarial fever, tertian Malarial fever, quartan Malarial fever, clinical	3		4									
Malarial lever, quartan					• • • •		11	• • • •	• • • •	• • • • •		
Measles			2						5			
Measies Diphtheria and croup Influenza Dysentery Dysentery, entemoebic Dysentery, unclassified Leprosy Chicken pox Mumps Yaws Pyemia							1	2	1			
nfluenza	2	1	1								• • • •	
Dysentery entemochic	1		· · · i	• • • • •			2	1				•••
Dysentery, unclassified									2			
Leprosy			1									
chicken pox			2						4	• • • •		
dumps			1							• • • •	• • • •	
Pyemia			-					• • • •	1			
Anthrax			1									
Anthrax Pellagra Puberculosis of the lungs Disseminated tuberculosis									1			
l'uberculosis of the lungs	2	1	4			1			1			
Disseminated tucerculosis.			1	• • • •		1	····i					
syphilis, primary syphilis, secondary syphilis, tertiary syphilis, period not stated Gonococcus infection			3 2				4					
Syphilis, tertiary			5						3			1
Syphilis, period not stated			2						1			
Gonococcus infection								1	1			
Gonorrhea Gonorrheal arthritis		1	11				17					
Gonorrheal buto							1	1				
Gonorrheal orchitis and epididymitis	1							1	-			-
epididymitis	1		1									
Soft chancre		1	4 2				12	2				
Adenitis chancroidal Cancer and other malignant tumors of the stomach												-
and liver Cancer and other malignant	• • • • •	••••	1						2	••••		
tumors of the peritoneum,												
intestines, rectum Cancer and other malignant			1							••••		
tumors of the female geni- tal organs.	1								1			

IN THE HOSPITALS OF THE PANAMA CANAL.

			C	olor	ı H	osp	ital										Tot	al.					
	Er	npl	oye	es.		N	lone	emp	oloy	ees.			En	npl	oye	es.		N	on	emp	loy	ees.	
	dmi		De	eath	ns.	A	dmi	is-	De	ath	ıs.	Ac	lmi	s- i.	De	eath	ıs.	A	dmi	is-	De	eath	ıs.
V	7.		11	r.		W	v.		W	7.		W	۲.		N	r.		N	7.		W	r.	
Americans.	Europeans.	Black.	Americans.	Europeans.	Black.	Soldiers.	Others.	Black.	Soldiers.	Others.	Black.	Americans.	Europeans.	Black.	Americans.	Europeans.	Black.	Soldiers.	Others.	Black.	Soldiers.	Others.	Black.
													1	1			1		1 1	1			
		11 33			1		1 1 1 1 1 1 1 1	1 1 1				2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1 1 2 2 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1 1 1	15 10 11 11 11 12 	1 1 1 1 1 1 1 1 1 2 5 2	3 5 1 1 2 1 2 1 1 1 1 1 1 1 1 1 1 1			3111
														1						1			

					And	on I	Iospi	ital.				13
		Е	mpl	oyee	s.			No	nem	ploye	es.	
	Ad	missi	ions.	D	eath	ıs.	Adı	niss	ions.	D	eath	s.
Diseases.	Wh	ite.		Wh	ite.		Wh	ite.		Wh	ite.	
		1					-				1	
	Americans	Europeans	Black.	Americans.	Europeans	Black.	Soldiers.	Others.	Black.	Soldiers.	Others.	Black.
	4	邑	В	4	鱼	m	Sc	0	B	SS -	ō	B
General diseases—Contd.												
Cancer and other malignant tumors of the breast	1	i	2					1	1			
Diseases of the nervous sys- tem and of the organs of special sense.												
Cerebral hemorrhage, apoplexySoftening of the brainOther forms of mental	1	1	1			1						
alienation			1				1	1				
Epilepsy	i 1		}				3	1				
vous system							1					
their annexa Diseases of the ears	1 2		9				2 2	2 2	6			
Diseases of the circulatory system.												
Organic diseases of the heart Angina pectoris			3				1		1		1	
bitis, etc.)	1	· · · i	2				3	1				

IN THE HOSPITALS OF THE PANAMA CANAL—Continued.

			C	olo	n H	osp	ital		-								Tot	al.					
	Eı	mpl	oye	es.		ı	Von	emp	oloy	ees		,	E	mpl	oye	es.		1	Von	emı	oloy	ees	
A	dm	is-	D	eatl	ıs.	A	dm ion	is- s.	De	ath	ıs.	A	dm ion	is-	D	eatl	hs.	A	dm	is-	De	ath	ıs.
v	v.		V	v.		v	v.		v	v.	T	V	v.		7	v.		7	v.		v	v.	
Americans.	Europeans.	Black.	Americans.	Europeans.	Black.	Soldiers.	Others.	Black.	Soldiers.	Others.	Black.	Americans.	Europeans.	Black.	Americans.	Europeans.	Black.	Soldiers.	Others.	Black.	Soldiers.	Others.	Black.
																• • • •							
							···i					1 1		2		• • • •			2	i			
												1						1 1		1			
														1			1			-			
		1						1				····		1 1			1	1 3	1 1 1 1	1		.,.	
						i						1 2		9				1 2 2 2		1			
1		. 1						. 1				2		4				1		۰		···	
						1						1	1	2				3 1	i				

					Anc	on I	Iosp	ital.				
		E	mpl	oyee	s.			Non	nem	ploye	es.	
Diseases.	Adı	missi	ions.	D	eath	ıs.	Adı	nissi	io n s.	D	eath	s.
Diseases.	Wh	ite.		Wh	ite.		Wh	ite.		Wh	ite.	
	Americans.	Europeans.	Black.	Americans.	Europeans.	Black.	Soldiers.	Others.	Black.	Soldiers.	Others.	Black.
Diseases of the circulatory system—Continued.												
Varicocele			 1 1				3 2		1			
Diseases of the respiratory system.												
Diseases of the nasal fossæ Acute bronchitis. Chronie bronchitis. Lobar pneumonia. Pleurisy. Asthma. Abscess of lungs.			4 1 1			3	3 1	4 2		1		
Diseases of the digestive system.												
Diseases of the mouth and annexa Diseases of the teeth and gums			1									
Stomatitis. Diseases of the pharynx. Follicular tonsillitis. Gastroectasis. Acute gastritis	5		1				1 3 6 1	15	6			
Chronic gastritis. Diarrhea and enteritis (under 2 years)								1 1				
Diarrhea and enteritis (2 years and over). Colitis. Ankylostomiasis			i 1					i	1			
Intestinal parasites Acute appendicitis Chronic appendicitis Inguinal hernia Intestinal obstruction	····i		i				4 1 3 1	3	1			

IN THE HOSPITALS OF THE PANAMA CANAL—Continued.

			C	olo	ı H	osp	ital										Tot	al.					
	E	npl	oye	es.		2	Non	emp	oloy	rees			Eı	npl	oye	es.		N	lon	emp	oloy	ees.	
A	dm ions	is-	D	eatl	ıs.	A	dm ion:	is-	De	eath	ıs.	A s	dm	is-	D	eatl	ıs.	A	dm ion:	is-	De	eath	ıs.
v	v.		V	V.		v	v.		v	v.		W	7.		v	v.		V	v.		v	v.	
Americans.	Europeans.	Black.	Americans.	Europeans.	Black.	Soldiers.	Others.	Black.	Soldiers.	Others.	Black.	Americans.	Europeans.	Black.	Americans.	Europeans.	Black.	Soldiers.	Others.	Black.	Soldiers.	Others.	Black.
																•••		3 2		1			
•••														1									
1		4			1			1				5 1 1 1	i 	8 1 1 1			4	3 1	4 2	1 1	i		
1						1					1	5		1				1 3 6 1	15	6			
1		2						2				3 1		1 1 1 3				4	1 1 3	2			

					And	on I	Iospi	ital.				
		Е	mpl	oyee	s.		-	No	nemj	ploye	es.	
•	Adı	missi	ions.	I	eath	ıs.	Adı	niss	ions.	D	eath	s.
Diseases.	Wh	ite.		Wh	ite.		Wh	ite.		Wh	ite.	
											1	
	cans	ans		sans	Sans		ç,			y,		
	Americans.	Europeans	Black.	Americans.	Europeans	Black.	Soldiers	Others.	Black.	Soldiers	Others	Black.
	¥	国	<u>m</u>	4	日	B	S.	0	B	- xx	0	B
Discases of the digestive system—Continued.												
Other diseases of the intes-	- 0		1									
tines	1											
Biliary calculi. Other diseases of the liver Abscess of liver (unquali-	2							1				
fied)		i										
Nonvenereal diseases of the genito-urinary system and annexa.						-						
Acute nephritis	 						1		1			
Bright's disease (chronic nephritis)									2			
Other diseases of the kidney and annexa Pyelo-nephrosis. Diseases of the bladder. Cystitis								3				
Diseases of the bladder								1				
									2			
urinary abscess, etc Stricture of the urethra,			3				J	1				
nonvenereal	1		1					j	2			
Nonvenereal diseases of												
the male genital organs Hydrocele Uterine hemorrhage (non-	1						1	1				
puerperal)								1				
Uterine tumor (noncan- cerous)	l								2			
Other diseases of the uterus.	2							7	4			
the ovary. Salpingitis and other diseases of the female gen-									1			•••

IN THE HOSPITALS OF THE PANAMA CANAL—Continued.

			(olo	n H	osp	ital	١.									Tot	al.					
	E	mpl	oye	es.		1	Non	em	ploy	rees		2	Е	mpl	loye	es.		1	Von	emj	ploy	rees	
A	dm ion:	is- s.	D	eatl	ns.	A	dm	is- s.	De	eath	ıs.	A	dm ion	is- s.	D	eatl	hs.	A	dm	is-	De	eatl	ıs.
v	v.		v	v.		v	v.		v	v.	Ī	v	v.		v	v.		v	v.		v	v.	
Americans.	Europeans.	Black.	Americans.	Europeans.	Black,	Soldiers.	Others.	Black.	Soldiers.	Others.	Black.	Americans.	Europeans.	Black.	Americans.	Europeans.	Black.	Soldiers.	Others.	Black.	Soldiers.	Others.	Black.
		i					1 1	i				2 1		1 1				3	5 4	2			
												2	···	i					1 1				
								1				•••		•••	•••	•••	•••	•••	•••	1	•••	•••	• •
1		1			1			2			1	1		2			2			4			
							1										1		4 1 1 2	2 2			
 i												1 1		3					1 	2			
								1				3		1					1 1 1	2			
							1					2							8	2 4			
								1												11			1

					And	on I	Hosp	ital.				
		E	mpl	oyee:	S.			No	nemj	ploye	es.	
Diseases.	Adı	miss	ions.	D	eath	s.	Adı	nissi	ions.	D	eath	s.
Diseases.	Wh	ite.		Wh	ite.		Wh	ite.		Wh	ite.	
	Americans.	Europeans.	Black.	Americans.	Europeans.	Black.	Soldiers.	Others.	Black.	Soldiers.	Others.	Black.
Nonvenereal diseases of the genito-urinary system and annexa—Continued.												
Nonpuerperal diseases of the breast (cancer ex- cepted) Benign tumor of breast								1 1				
The puerperal state.												
Normal labor Accidents of pregnancy Hyperemesis gravidarum Abortion. Other accidents of labor Puerperal albuminaria and convulsions								8 1 2	4 2 1 1			i
Furuncle. Carbuncle. Acute abscess Phlegmon and cellulitis. Dhobie itch	i		3			1	1 4 4					
Ulcer of the skin Ingrowing nail Other diseases of the skin and annexa	1						4	1	5			
Diseases of the bones and of the organs of locomotion.												
Diseases of the bones (tu- berculosis excepted)												
tism excepted). Arthritis. Synovitis. Amputations. Other diseases of the organs of locomotion.			3					2 2	2 1 1		-1	

IN THE HOSPITALS OF THE PANAMA CANAL-Continued.

		C	olo	n H	osp	ital										Tot	al.					
Eı	npl	оуе	es.		1	Von	emj	oloy	rees		-	Eı	npl	oye	es.		1	Von	emp	oloy	rees	
Admi	S-	D	eatl	ns.	A	dm	is-	De	eath	ıs.	A	dm	is-	D	eatl	ns.	A	dm	is-	De	eath	ıs.
w.		V	v.		v	v.		v	v.		W	7.		V	7.		v	v.		v	v.	
Americans.	Black.	Americans.	Europeans.	Black.	Soldiers.	Others.	Black.	Soldiers.	Others.	Black.	Americans.	Europeans.	Black.	Americans.	Europeans.	Black.	Soldiers.	Others.	Black.	Soldiers.	Others.	Black
																		1 1				
						1 1 	2											9 2	4 4 1 1			
2	1					1	2				2	1	1 1 2 3 			i	1 -4 4		 2 1			
	1												2				4		5			
											2 1		1				3	3	1			
	 2						 1						1 3 					2 2	2 1 2			

					And	on I	Iospi	tal.				
		E	mple	oyee	s.			No	nemj	oloye	es.	1
Diseases.	Adı	missi	ons.	Г	eath	ıs.	Adı	nissi	ons.	D	eath	s.
Diseases.	Wh	ite.		Wh	ite.		Wh	ite.		Wh	ite.	
	Americans.	Europeans.	Black.	Americans.	Europeans.	Black.	Soldiers.	Others.	Black.	Soldiers.	Others.	Black.
Malformations.												
Congenital malformations (stillbirth not included)			1						3			
Diseases of early infancy.				П								
Newborn child. Premature birth. Malnutrition. Other causes peculiar to early infancy (including various consequences of labor).								7	6 1 1			i
Affections produced by external causes.										= ,		
Poisoning by food		i				1	6		1			
Traumatism by fall	1		8 6 1	i			1 1	1 2	1			
Traumatism by other crushings (vehicles, railroads, landslides, etc.)Railroad traumatismInjuries by animalsEffects of heatFracture (cause not speci-			9				i		····i			
fied)	2		6				1	4	2			
Ill-defined diseases.												
Other external violence Infections of undetermined origin No disease	1 1		15 3 1				4 4 1	5 12	1			
Total	67			1		11			-	1	1	14

IN THE HOSPITALS OF THE PANAMA CANAL—Continued.

V	dm	is-				N	Von	oma						_			_	_					
V	ions	is-	D		_	Employees. Nonemployees.						Employees. Nonemployees.											
_	v.			Admissions. Deaths.		Admissions, Deaths.			Admis- sions. Death		ıs.	Admis- sions.		is-	Deaths		s.						
			W	v.		V	v.		V	٧.		W	7.		W	7.		W	7.		V	7.	
Americans.	Europeans.	Black.	Americans.	Europeans.	Black.	Soldiers.	Others.	Black.	Soldiers.	Others.	Black.	Americans.	Europeans.	Black.	Americans.	Europeans.	Black.	Soldiers.	Others.	Black.	Soldiers.	Others.	Black.
														1		•••				3			
							1						 XI						8	6 1 1			i
															•••		•••						1
1						1	1					1	· i	4			1	7	i	1			
1 1		2 2 3					1 3	1 2				 2 1		10 8 4	i			1 1	1 3 3	1 1 2			
		4						1			1	1		13 1 				i		1			1
														6 1				1	4	2			
17	7	37			4	4	1 23	-			2	5 1 1 84		15 3 2 210			15	4 1 170	13	,	1	1	16

TABLE VIII.—CONSOLIDATED [A=white Americans; F=white

		maii Apr.		Ad	lmit	ted.		Dièd	l.
-1 11 1	A.	F.	В.	A.	F.	В.	A.	F.	В
ANCON HOSPITAL.									
Panama Canal employees	23 6	11	146 70 2	60 7	13 1 1	131 42 1	1		3
Other pay patients Charity patients	109	27	49 34	247	52	86 28	2		2
Total	147	40	301	321	69	288	3		20
Insane Department.						-			
Panama Canal employees		4	11 4 166		3	8			1
Panama pay patients	5 4	24 4 4	48		1	i			1
Total	10	36	233		4	9			- 5
Grand total	157	76	534	321	73	297	3		25
Corozal Farm,	-		-	-	==	-	-	-	-
Panama Canal employees		11	42			7			
Charity patients			20			,			
COLON HOSPITAL.			30			3			
Panama Canal employees	4	1	4	15	1	14			
Panama Railroad employees Panama pay patients Other pay patients	16	3	9	16	10	23 11 11			1 1
Charity patients	1		1		1	4			
Total	12	4	16	33	12	63			6
PALO SECO LEPER ASYLUM.									
Panama Canal employees. Panama pay patients. Charity patients.		2 2	1 34 18						
Total		4	53			-	_		
GRAND TOTAL.	=	-	-	=	==		===	===	-
Panama Canal employees	27	27	204 83	75 9	14 1	152 65	1		7 8
Panama pay patients. Other pay patients. Charity patients.	1120 14	26 34 8	202 55 131	263 7	62 4	20 97 36	2		10 2
	169	95	675	354		370	3		31

HOSPITAL REPORT. foreigners; B=blacks.]

sick.	onstantly		nain		red.	nsfer	Trai	ed.	charg	Dis		
	Dlask	ite.	Wh		pr. 5	A						
Total.	Black.	Foreign.	American.	В.	F.	A.	В.	F.	Α.	В.	F.	Α.
170. 67 64. 20	135. 20 60. 03	9.60	25. 87 3. 87	122 56	8	22	2			146 50	16	60 10
2.77	2.37	.40		1			2	1				
193.07	50.60	34.87	107.60	46	35	103	4			81	44	251
35.37	29.80	1.50	4.07	29				••••		27	1	11
466.08	278.00	46. 67	141.41	254	46	133	11	1		304	62	332
15.00	11.00	4.00		11	4						,	
3.36	3.36			2				<u>.</u>		1		
191.10 10.80	165.67 4.00	24.43 2.47	1.00 4.33	168	25 2	3	1	1		2	1 2	2
56.50	48.37	4.13	4.00	49	5	4						
276.76	232.40	35.03	9.33	233	36	8	1	1		3	3	2
742. 84	510.40	81.70	150.74	487	82	141	12	2		307	65	334
50.30	39.83	10.47		43	10					6	1	
31. 20	31.20		<u></u>	30						3		
									i			
9.82 8.13	4.56 7.63	.16	5.10 .50	7	1	4	3 4		3	11 17	1	12
. 86	. 86			1		:-	7	:-	3	7		::-
10.09 .96	3.36	2.03 .33	4.70	4	2	5	1	5	3	4	6	14
29.86	17.04	2.52	10.30	16	3	9	16	5	6	41	8	30
1.00	1.00											
1.00 36.00	1.00 34.00	2.00		34	2	• • • •			• • • •			
20.00	18.00	2.00		18	2							
57.00	53.00	4.00		53	4							
246, 79	191.59	24, 23	30, 97	181	23	26	5		3	163	18	72
75.69	71.02	.30	4.37	65.		3	7			68	1	13
230.73	202.90	26.83	1.00	204	27	1	10	2		4	1	
213.96 144.03	57.96 128.00	39.37 7.96	116.63 8.07	53 126	39 10	111	1 5	5	3	88	52 2	267 12
911.20	651.47	98.69	161.04	629	99	150	28	7	6	357	74	364

TABLE IX.—CONSOLIDATED DISPENSARY REPORT. EMPLOYEES TREATED IN QUARTERS.

	Re- maining Apr. 1.			d- ted.	Died.		Dis- charged.		Trans- ferred.		Re- maining Apr. 30.		Days lost.		
	w.	В.	w.	В.	w.	В.	w.	В.	w.	В.	w.	В.	w.	В.	Total.
Ancon Balboa Pedro Mi-	4 7	2	89 65	39			89 64	22	2 4	17	2 4	2	187 287	88	187 375
guel Paraiso Gamboa	1 3		10 22	8			10 23	1 8 1	1 2				36 62	3 10 1	39 72
Gatun Colon	1 4	18	10 -38	1 34			10 39	1 31			1 3	21	41 245	23 456	64 701
Total.	20	20	234	84			235	64	9	17	10	23	858	581	1,439

ALL CASES TREATED BUT NOT EXCUSED.

	E	mploye	es.	Nor	emplo	yees.	Total.			
	w.	В.	Total.	w.	В.	Total.	w.	В.	Total.	
Ancon Balboa. Pedro Miguel. Paraiso Gamboa. Gatun. Colon.	2, 206 3, 266 579 960 24 355 942	3, 184 3, 604 881 2, 473 89 1, 302 2, 173	5,390 6,870 1,460 3,433 113 1,657 3,115	1,656 837 655 669 6 611 658	2,240 844 250 906 353 1,230 845	3,896 1,681 905 1,575 359 1,841 1,503	3,862 4,103 1,234 1,629 30 966 1,600	5, 424 4, 448 1, 131 3, 379 442 2, 532 3, 018	9, 286 8, 551 2, 365 5, 008 472 3, 498 4, 618	
Total	8,332	13,706	22,038	5,092	6,668	11,760	13, 424	20,374	33,798	

CONSOLIDATED ADMISSIONS REPORT.

	White.	Black.	Total.
Total admissions to hospitals, excluding Corozal farm and chronic ward. Total admissions of employees to quarters	439	360	799
	234	84	318
Total Less number of patients transferred between hospitals, and from quarters to hospitals, whose admissions are duplicated in above figures	673	39	1,117 45 60
Net admissions to hospitals and quarters Net admissions of employees to hospitals and quarters Annual average per thousand of admissions of employees to hospitals and quarters	652	405	1,057
	321	265	586
	828, 21	108, 89	207.70

TABLE IX.—CONSOLIDATED DISPENSARY REPORT—Continued.

CONTAGIOUS AND INFECTIOUS DISEASES REPORTED.

Diseases.	Pana- ma.	Colon.	Canal Zone.	Total.
Measles.		3	7	14
Typhoid fever	3	1	2	1 (
Annual average per 1,000	59	. 49	. 73	. 61
Scarlet fever		1		1
Mumps				1
Dysentery	2			2
Chicken pox	11		11	2
Diphtheria	4		1	
Malaria fever	3		53	56
Tuberculosis	23	2	7	35
Whooping cough				
Leprosy	1		1	
Diarrhea			6	
Pneumonia.		2	1	
Syphilis.		_		

 $^{^{\}rm 1}$ Two additional cases of typhioid occurred—one a passenger and the other a member of erew of ship, not included.

	White.	Black.	Total.
Hospitals:			
Ancon Hospital	43.64	209.59	253.23
Colon Hospital	12.82	17.04	29.86
Palo Seco Leper Asylum		1.00	1.00
Total	56.46	227.63	284.09
Quarters:			
Ancon	6, 23		6, 23
Balboa	9.57	2, 93	12.50
Pedro Miguel	1.20	.09	1.29
Paraiso	2.07	. 33	2.40
Gamboa		. 03	.03
Gatun	1.33	.77	2.10
Colon	8.16	15.20	23.36
Total	28, 56	19.35	47.91
	Hospi- tals.	Quarters.	Total.
1			
Average number of employees constantly sick: White	56.46	28, 56	85.02
Colored.	227. 63	19.35	246. 98
Colored	221.03	19. 33	240.90
Total	284.09	47.91	332.00
Average number of employees constantly sick per			
1,000:			
White	12.14	6.14	18.28
Colored	7.79	. 67	8.46
Total	8.39	1.42	9.81

TABLE XI.—AVERAGE LENGTH OF STAY IN HOSPITALS OR QUARTERS FOR EACH ADMISSION OF SICK EMPLOYEE.

	White.	Black.	Total.
Hospitals:	-		
Ancon Hospital	14.68	. 23, 98	21.26
Colon Hospital	10, 84	8.23	9.08
Quarters:	20.01	0.20	0.00
Ancon	2, 21	i	2, 21
Balboa	4.18	2,41	3, 53
Pedro Miguel		3.00	3, 33
Paraiso	2.76	1.20	2.39
Gamboa.		1.00	1.00
Gatun	4.10	23.00	5.82
Colon			
Союн	7.46	20.67	13.31

TABLE XII.—FINANCIAL STATEMENT, DEPARTMENT OF HEALTH EXPENDITURES.

	March, 1916.	February, 1916.	March, 1915.
Administration: Chief health office	\$1,348.00	\$531.71	\$484.01
Ancon Hospital	24, 974, 26	24, 867, 92	29, 055. 31
Board of Health Laboratory	1,388.90	1,746.25	
Corozal farm	6, 050, 23	5, 758, 74	3, 022, 10
Chronic ward	218.97	194.78	237. 57
Colon Hospital	3, 842, 12	3,663.76	3, 539. 03
Palo Seco Leper Asylum	1,564.08	1,639.30	2,044.54
Santo Tomas Hospital	714.75	757.00	629, 49
Medical storehouse	817.00	1,016.41	795. 22
	39, 570. 31	39, 646. 16	39, 323. 26
District dentists	ı́ 125. 31		15.88
Dispensaries: Naos Island. Balboa.	1, 124, 83	1,068.21	94.39 1,076.85
Corozal		1 90. 89	825.14
Pedro Miguel	451.04	461.72	496. 78
Paraiso	600.58	441. 20	596.18
Culebra	123.08	100 51	100 70
Gamboa	149. 34	138.71	138. 78
GatunToro Point	640. 53	789. 23 236. 83	551.98
	2,964.09	3, 045. 01	3, 795. 98
Sanitary division:			
General inspector	50.00	50.00	
Health office, Panama	3,015.54	3,099.03	2,908.43
Street cleaning	4,081.38	4, 043. 71	4,301.94
Health office, Colon	3, 332. 20	2,930.29	1,717.07
Street cleaningZone sanitation—	2, 229. 52	2, 284, 34	2,020.39
Ancon	4,070.88	5, 797, 01	849, 36
Balboa	3, 207. 32	2,812.59	643. 81
Corozal	391.92	598, 35	900, 66
Pedro Miguel	4,007.73	3,560.80	696. 32
Paraiso			756, 18

TABLE XII.—FINANCIAL STATEMENT, DEPARTMENT OF HEALTH EXPENDITURES—Continued.

	March, 1916.	February, 1916.	March, 1915.
Sanitary division—Continued.			
Zone sanitation—Continued.	900.07	904 10	2111 50
Frijoles	\$69.07	\$84.16	\$111, 50
Gatun		4, 487. 09	899. 31
Cristobal-Mount Hope	2, 426. 42	2,524.62	1,036.25
	30, 430. 84	32, 271. 99	17, 156. 67
Quarantine division:			
Chief quarantine office		116. 58	
Balboa-Panama		1,870.30	1,729.00
Colon-Cristobal	2,807.74	2,570.01	2,667.68
^	5, 050. 21	4, 556. 89	4, 396. 68
RECAPITULATION.			
Chief health officer	1,348.00	531. 71	484.01
Hospital division		39, 646, 16	39, 323, 26
Dispensaries	2,964.09	3,045.01	3, 795. 98
Sanitary division	30, 430, 84	32, 271. 99	17, 156, 67
Quarantine division	5, 050. 21	4, 556. 89	4,396.68
Total	79, 363. 45	80, 051. 76	65, 156. 60
		1	

March, 1916, last available figures.

TABLE XIII.—ANCON HOSPITAL.

REPORT OF NATIONALITY OF PATIENTS TREATED,

•	Total	Amer	ican.	Other	nations.
	number treated.	White.	Black.	White.	Black
Hospital: Panama Canal employees Panama Railroad employees. Panama Government pay	384 126	81 13	2	24 1	277 112
cases. Other pay cases. Charity cases.		356 16		79 4	135 62
Total	1,166	466	2	109	589
Asylum: Panama Canal employees Panama Railroad employees. Panama Government pay	15 4			4	11 4
cases Other pay cases Charity cases.	202 13 58	5 4	1	27 4 5	174 4 49
Total	292	9	1	40	242
Grand total	1,458	475	3	149	831
Soldiers Chronics Cripples	244 33 60	244		11	33 49

TABLE XIII.—ANCON HOSPITAL—Continued. REPORT OF DAYS LOST IN HOSPITAL.

0	Total.	Amer- ican.	Other white.	Black.
Hospital:				
Panama Canal employees	5, 120	776	288	4,056
Panama Railroad employees	1,926	116	9	1,801
Panama Government pay cases	83	2 000	12	71
Other pay cases	5,792 1,061	3, 228 122	1,046 45	1,518 894
Total	13,982	4,242	1,400	8, 340
Asylum:				
Panama Canal employees	450		120	330
Panama Railroad employees	101			101
Panama Government pay cases	5, 733	30	733	4,970
Other pay cases	324	130	74	120
Charity cases	1,695	120	124	1,451
Total	8,303	280	1,051	6,972
Grand total	22, 285	4, 522	2, 451	15, 312
Soldiers	2,571	2,571		
Chronics.	936	2,011		936
Cripples	1,509		314	1, 195

Average cost of subsistence per patient per day, \$0.22809.

WARD LABORATORY REPORT.

Blood examinations, total number	548
Estivoautumnal	25
Tertian	17
Quartan:	3
Differential counts.	26
Hemoglobein estimations	41
	63
Leucocyte counts	
Red blood counts	3
Stool examinations, total number.	303
Ameba Ascaris lumbroincoides	5
	1
Ciliated monads	11
Ciliated monads Entameba (hystolitica and tetragena)	2
Guaiac tests	7
Pus and blood.	25
Strongloides	6
Tenia saginata dispar (ova).	ĭ
Triogenhalus dispar (0va).	10
Tricocephalus dispar	11
Uncinaria (ova)	
Urine examinations, total number	1,450
Albumen	259
Bile	5
Casts	205
Ciliated monads	4
Epithelia	432
Guaiac tests	1
Indicon	42
Pus and blood.	336
Sugar (positive 16, negative 174).	290
Sputum examinations, total number	182
Positive for tubercle bacilli	18
	90
Smear examinations, total number	25
Urethral	20
Vaginal	
Urine	5
Eye	1
Foot.	1
Spinal fluid	11
Sputum	2
•	

TABLE XIII.—ANCON HOSPITAL—Continued. REPORT OF SURGICAL OPERATIONS PERFORMED.

	Number.	Died.
Amputations: Digits, multiple	1	
Operations on bones:		
Ostlectomy. Wiring of fractures, simple. Wiring of fractures, compound.	1	
Wiring of fractures, simple	3	
Wiring of fractures, compound	3	
Adenectomy:	10	
Inguinal, single Inguinal, double	13	
Ingumai, double	1	
Herniotomy: Inguinal, single	_	
Femoral	1	
Genito-urinary tract:		
TYmotomotomous	1	
Urethrotomy internal	2	
Urethrotomy, external	ī	
Urethrotomy, external Varicocele, radical cure	6	
Hydrocele, single, radical cure	2	
Hydrocele, double, radical cure	1	
Epididymotomy	11	
Amputation of scrotum	1	
Curêtage uteri	4	
Perineoplasty	1	
Obstetrical:		
Cæsarean section, abdominal	2	
Low forceps	1	
Rectum:		
Hemorrhoids, radical cure	6	
Fistula in anus, excision of	2	
General:		
Thyroidectomy Varicose veins, excision of	1	
Varicose veins, excision of	2	
Tenormaphy	2	
Laparotomy: For general peritonitis (not traumatic or appendicial)	1	
Exploratory	2	
Gastrectomy, partial	ī	
Gastro-enterostomy	1	
Annendectomy	19	
Cholecystostomy	1	
Cholecystectomy	2	
Supravaginal hysterectomy	5	
Hysteremyomectomy	1	1
Ovarian oystectomy	1	
Suspensio-uteri	3	
Rupture of spleen	1	
Minor operations	87	
		-
REPORT OF OPERATIONS, EYE AND EAR DEPART	MENT.	
denoidectomy		
dvancement		
ataract extraction		
fastoidectomy		
finor eye		
finor ear		
linor throat		
faxillary sinusotomy, simple		
terygium excision.		
rontal sinusotomy		
ubmucous resection		
Expression Consillectomy		
furbinectomy		:
dibinocioniy		
Refractions		12

TABLE XIII,-ANCON HOSPITAL-Continued. OUT-PATIENT DEPARTMENT.

	Total visits.	New cases.	Pay cases.	Prescrip-	
Medical clinic Surgical clinic Eye and ear clinic	286 193 591	193	193 70	57 10 14	262 15 306
Total	1,070	501	81	583	
MONTHLY VACCE	NATION R	EPORT.			
Number of adults vaccinated Number of "takes" Number of school children vaccinated Number of "takes"				9	
Board of Healt	rh Labor	ATORY.			
Bacteriological examinations: Blood cultures. Throat cultures. Urines. Stools. Sputum Pathological fluids, exudates, etc. Wassermann reactions.				46 34 27 1 7	
Leper suspects. Agglutination reactions Autogenous vaccines prepared Antityphoid vaccinations. Proparations of salvarzanized blood se				. 1	
Antityphoid vaccinations. Preparations of salvarzanized blood sortyphonosomes in horses. Water, for H. O. C. Animal inoculations. Dairy milk from Panama, bacteriolos Dairy milk from Corozal farm, bacteri	gical count iological c	sounts		18 52 30	
Milk sediments					

Milk from private dairies supplying cities of Panama and Colon..... Mother's milk Urines

Paint. Vino de Cardui Gasoline. Kerosene.... Heroin Soda water

Chloride of lime.
White brass.
Water.

Soda water. Crude carbolic acid.

Butyric acid......
Surgical tissues neoplasms reported.....

Blood for malaria.... Chemical examinations:

Urines....

Butyric acid...

Rats examined:	
Mus musculus.	348
Mus norvegicus	
Mus alexandrinus	8
Mus rattus	
Bodies embalmed	1,309
Bodies embalmed	3
Interments at Corozal	14
Cromations	16

COROZAL HOSPITAL.

STATEMENT OF COMMITMENTS, DISCHARGES, AND DEATHS.

COMMITMENTS.

	Male.	Female.
From Canal Zone, first admission. From Panama Government, first admission. From Panama Government (retransfer from Ancon Hospital)	3 2 1 3	5
Total	8	5

¹ Had been transferred to Ancon Hospital for surgical treatment.

DISCHARGES.

	V	Well.		Improved.		proved.
	Male.	Female.	Male.	Female.	Male.	Female.
Barbados Panama			1	1	13	
Philippines United States					² 1 ³ 2	
Total	° 1		1	1	6	1

Transferred to Ancon Hospital for surgical treatment.
 Deported to Philippines.
 Deported to United States.

DEATHS.

Medical diagnosis.	Mental diagnosis.	Male.	Female.
Pellagra; infective exhaustive psychosis.	Infective exhaustive psychosis.	1	
Chronic nephritis; abscess of lungs; acute colitis.	Catatonic dementia		1
Softening of the brain; embolism and thrombosis.	Epilepsy	1	
Cerebral syphilis; chronic alcoholism Pellagra	Cerebral syphilis Pellagra		1

TABLE XIV.—COLON HOSPITAL.

NATIONALITY.

	White Ameri- can.	White foreign.	Black,	Total.
Panama Canal employees Panama Railroad employees Panama pay	19	2	18 32	38
Other pay. Charity cases.	22 1	13 1	13 5	48
	45	. 16	. 79	140

Cost of subsistence per patient per day, 33 cents.

LABORATORY REPORT.

Blood examinations	56
Estivo-autumnal	7
Tertian	2
White blood counts	12
Hemoglobin	- 5
Differential counts	4
Stool examinations.	14
Blood	1
Pus	1
Strongyloides	3
Uncinaria	ő
Tricocephalus dispar	9
Urine examinations.	159
Albumen	53
Casts	37
	93
Epithelia	54
PusBlood	5
Indican	1
	1
Sugar	01
Triple phosphates.	21
Sputum examinations	- 8
Positive for tubercle bacilli.	Ţ
Smear examinations	6
Urethral	2
Vaginal	3
Eye	1

SURGICAL OPERATIONS.

Operations on bones: Ostiectomy	
Inguinal, single	1
Herniotomy:	•
Inguinal, single	3
Inguinal, double	1
Genito-urinary tract: Curettage uteri	1
Rectum: Fistula in anus, excision of	1
General: Extensive injuries to soft parts, operation for	2
Laparotomy:	
Gastro-enterostomy.	1
Appendectomy	4
Pan-hysterectomy	1
Suspensio-uteri	2
Minor operations, various.	10
Minor operations, various (dispensary).	147
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

TABLE XV.—PALO SECO LEPER ASYLUM. NATIONALITY OF PATIENTS.

Class.	Number treated.		Amer	Americans.		ers.
	White.	Black.	White.	Black.	White.	Black,
Panama Canal employees Panama Railroad employees		1				1
Pay cases	2	34			2	34
Charity cases	2	18			2	18
Total	4	53			4	53

Cost of subsistence, per patient, per day, 27 cents.

TABLE XVI.—SANTO TOMAS HOSPITAL.

•	Remain- ing Apr. 1.	Ad- mitted.	Dis- charged.	Died.	Remain- ing Apr. 30.
Pay cases Charity cases	20 393	45 747	37 661	3 66	25 413
Total	413	792	698	69	438

Average number of patients constantly sick.	426
Total number of days treatment.	19 704
A verage number of days treatment for each patient	10

NATIONALITY.

Class	Number treated.	Amer	icans.	Other nations.	
Class.		White.	Black.	White.	Black.
Pay cases	65 1,140	3 7	1	29 119	33 1,013
Total	1,205	10	1	148	1.046

DISPENSARY REPORT.

Class.	White.	Black.	Total.
Natives. Foreigners.	25 46	564 344	589 390
Total	71	908	979

DISEASES TREATED.

Malaria	3
Influenza	
Dysentery	
Erysipelas	
Other epidemic diseases	
Erysipelas. Other epidemic diseases. Purulent infection and septleemia	
Pellagra	
Tuberculosis of the lungs	1
Tuberculosis of the lungs. Tuberculosis of other organs.	
Acute miliary tuberculosis. Syphilis	
Syphilis	4
Gonococcus infection Alcoholism (acute or chronic).	4
Alcoholism (acute or chronic)	1
Other diseases of the spinal cord	
Paralysis without specified cause	
Other forms of mental alienation Epilepsy	
Epilepsy	
Follicular conjunctivitis	
Föllicular conjunctivitis Other diseases of the nervous system Other diseases of the eyes and their annexa	
Other diseases of the eyes and their annexa	
Acute endocarditis. Organic diseases of the heart.	
Organic diseases of the heart	1
Diseases of the arteries etc	
Diseases of the veins. Diseases of the lymphatic system. Diseases of the nasal fossæ.	
Diseases of the lymphatic system.	1
Diseases of the nasal fossæ	
Chronic bronchitis	200
Broncho-pneumonia	
Pneumonia	1
Pleurisy.	
Pleurisy. Other diseases of the mouth and annexa.	
Diseases of the pharvnx	1
Ulcer of the stomach	
Other diseases of the stomach. Diarrhea and enteritis (under 2 years). Diarrhea and enteritis (2 years and over).	
Diarrhea and enteritis (under 2 years)	
Diarrhea and enteritis (2 years and over)	
Ankylostomiasis. Appendicitis and typhlitis. Hernias, intestinal obstructions.	3
Appendicitis and typhlitis	
Hernias, intestinal obstructions	
Other diseases of the intestines	
Cirrhosis of the liver	
Other diseases of the liver	
Bright's disease (chronic penhritis)	1
Calculi of the urinary passages. Diseases of the bladder	
Diseases of the bladder	
Diseases of the urethra	
Nonvenereal diseases of the male genital organs	
Uterine hemorrhage (nonpuerperal)	
Uterine tumor (noncancerous)	
Metritis	
Other diseases of the uterus. Salpingitis and other diseases of the female genital organs. Nonpuerperal diseases of the breast (cancer excepted)	
Salpingitis and other diseases of the female genital organs	2
Nonpuerperal diseases of the breast (cancer excepted)	
Normallahor	7
Accidents of pregnancy	2
Other accidents of labor	
Accidents of pregnancy Other accidents of labor. Puerperal albuminuria and convulsions. Acute abscess.	
Acute abscess	1.
Other diseases of the skin and annexa.	3
Other diseases of the skin and annexa Diseases of the bones (tuberculosis excepted) Diseases of the joints (tuberculosis and rheumatism excepted)	
Diseases of the joints (tuberculosis and rheumatism excepted)	
Other diseases of the organs of locomotion	
Congenital malformations (stillbirths not included)	
Other diseases of the organs of locomotion. Congenital malformations (stillbirths not included). Nurslings discharged from hospital without disease.	6
Other acute polsonings	
Burns (conflagration excepted)	
,	

Traumatism by firearmsTraumatism by cutting or piercing instrumentsTraumatism by machines	6
Traumatism by machines	1
Sprains	1
Fractures	8
Other external violence	28
Ill-defined organic disease	2
No disease	7
Total	698

SURGICAL OPERATIONS.

·	Number.	Died.
Amputations, thigh.	1	
Amputation, leg.	1	
Amputation, leg	1	
Laminectomy	1	
Ostiectomy	1	
Adenectomy:		
Inguinal		
Single	4	
Double	1	
Herniotomy:		
Inguinal—		
Single	7	
Double	1	
Urethrotomy:		
Internal	2	
External	1	
Hydrocele, single, radical cure	5	
Epididymotomy	1	
Curetage uteri	8	
Vaginal punctures	1	
Perineorrhaphy	2	
Thoracotomy	1	
Hemorrhoids, radical cure	6	
Fistula in anus, excision of	1	
Myorrhaphy	l î	
Excision of surface neoplasm	Ī	
Plastic operations for effects of disease	18	
Laparotomy for intestinal obstructions	ĩ	
Laparotomy, exploratory	l ī	
Appendectomy		
Appendectomy. Appendectomy with general peritonitis.	i	
Abscess of liver, laparohepatotomy for	1	
Pan-hysterectomy		
Salpingectomy, double	Ĭ	
Salningo-conhorectomy	3	
Salpingo-oophorectomy Ovarian cystectomy	ĭ	
Suspensio-uteri	4	
For eutopic gestation	2	
Gunshot wound of abdomen	Ī	
Minor operations, various		
Cataract extractions	3	
Pterygium	i	
Tonsillectomy.		
•		
Total	151	1

TABLE XVII,-SANITATION.

The following is a summary of sanitary work performed and material expended during the month of April, 1916, in the Canal Zone:

Work requests on supply department: Grass cutting.	- 0
Grass cutting.	4
Screening.	10
Miscellaneous. Work requests on engineering department	6
work requests on engineering department	9
Work requests on other departments	3
Notices served to abate nuisances	0
Arrests and convictions	0
Closets, inspections of	748
Stores, inspections of	40
Shops, inspections of	79
Garbage cans emptied	3,074
Closets disinfected	1, 133
Rat traps in use.	525
Rats destroyed	358
Rats destroyed Adult anopheles caught	3,430
Adult culices caught.	7,503
Stegomyia destroyed.	34
Larvacide usedgallons	258
Crude oil useddodo.	7, 115
Kerosene used do.	525
Kerosene useu	020
SUMMARY OF ROUTINE WORK DONE BY PANAMA HEALTH OFFICE	
Mosquito, rat, and fly work:	
Linear feet of ditches cleaned and maintained	30,620
Linear feet of new ditches dug. Number of cubic yards of earth used in filling.	1,318
Number of cubic vards of earth used in filling	0
Gallons of larvacide used	350
Gallons of crude oil used	1,315
Square yards of pools oiled	
	70.280
Water containers treated	70, 280 9, 547
Water containers treated	9,547
Water containers treated	9,547 217
Water containers treated	9,547 217 84
Water containers treated	9,547 217 84 59
Water containers treated. Mosquito breeding places found (stegomyia 130). Fly breeding places found. Flies trapped, quarts (13,000 per quart). Number of rats killed	9,547 217 84 59 1,014
Water containers treated. Mosquito breeding places found (stegomyia 130). Fly breeding places found. Flies trapped, quarts (13,000 per quart). Number of rats killed. Number of room disinfections.	9,547 217 84 59
Water containers treated Mosquito breeding places found (stegomyia 130) Fly breeding places found Flies trapped, quarts (13,000 per quart) Number of rats killed Number of room disinfections Garbage collection:	9,547 217 84 59 1,014
Water containers treated. Mosquito breeding places found (stegomyia 130). Fly breeding places found. Flies trapped, quarts (13,000 per quart). Number of rats killed. Number of room disinfections. Garbage collection: Number of loads of garbage removed to dump.	9,547 217 84 59 1,014 17
Water containers treated. Mosquito breeding places found (stegomyia 130). Fly breeding places found. Flies trapped, quarts (13,000 per quart). Number of rats killed. Number of room disinfections. Garbage collection: Number of loads of garbage removed to dump. Number of cubic yards of garbage removed to dump.	9,547 217 84 59 1,014 17 4,156 9.561
Water containers treated. Mosquito breeding places found (stegomyia 130). Fly breeding places found. Flies trapped, quarts (13,000 per quart). Number of rats killed. Number of room disinfections. Garbage collection: Number of loads of garbage removed to dump. Number of cubic yards of garbage removed to dump. Total number of cans of garbage emptied.	9,547 217 84 59 1,014 17
Water containers treated. Mosquito breeding places found (stegomyia 130). Fly breeding places found. Flies trapped, quarts (13,000 per quart). Number of rats killed. Number of room disinfections. Garbage collection: Number of loads of garbage removed to dump. Number of cubic yards of garbage removed to dump. Total number of cans of garbage emptied. Buildings:	9,547 217 84 59 1,014 17 4,156 9,561 42,171
Water containers treated. Mosquito breeding places found (stegomyia 130). Fly breeding places found. Flies trapped, quarts (13,000 per quart). Number of rats killed. Number of room disinfections. Garbage collection: Number of loads of garbage removed to dump. Number of cubic yards of garbage removed to dump. Total number of cans of garbage emptied. Buildings:	9,547 217 84 59 1,014 17 4,156 9,561 42,171 4,874
Water containers treated. Mosquito breeding places found (stegomyia 130). Fly breeding places found. Flies trapped, quarts (13,000 per quart). Number of rats killed. Number of room disinfections. Garbage collection: Number of loads of garbage removed to dump. Number of cubic yards of garbage removed to dump. Total number of cans of garbage emptied. Buildings: Number of buildings inspected. Number of loans for new buildings approved	9,547 217 84 59 1,014 17 4,156 9.561 42,171 4,874 21
Water containers treated Mosquito breeding places found (stegomyia 130). Fly breeding places found Flies trapped, quarts (13,000 per quart). Number of rats killed Number of room disinfections Garbage collection: Number of loads of garbage removed to dump Number of cubic yards of garbage removed to dump Total number of cubic yards of garbage emptied. Buildings: Number of buildings inspected Number of plans for new buildings approved Number of permits issued for repairs to old buildings.	9,547 217 84 59 1,014 17 4,156 9.561 42,171 4,874 21 66
Water containers treated. Mosquito breeding places found (stegomyia 130). Fly breeding places found. Flies trapped, quarts (13,000 per quart). Number of rats killed. Number of room disinfections. Garbage collection: Number of loads of garbage removed to dump. Number of cubic yards of garbage removed to dump. Total number of cans of garbage emptied. Buildings: Number of buildings inspected. Number of plans for new buildings approved Number of permits issued for repairs to old buildings. Total number of building permits issued.	9,547 217 84 59 1,014 17 4,156 9,561 42,171 4,874 21 66 87
Water containers treated. Mosquito breeding places found (stegomyia 130). Fly breeding places found. Flies trapped, quarts (13,000 per quart). Number of rats killed. Number of room disinfections. Garbage collection: Number of loads of garbage removed to dump. Number of cubic yards of garbage removed to dump. Total number of cans of garbage emptied. Buildings: Number of buildings inspected. Number of plans for new buildings approved. Number of permits issued for repairs to old buildings. Total number of buildings permits issued. Number of point in section.	9,547 217 84 59 1,014 17 4,156 9,561 42,171 4,874 21 66 87
Water containers treated. Mosquito breeding places found (stegomyia 130). Fly breeding places found. Flies trapped, quarts (13,000 per quart). Number of rats killed. Number of room disinfections. Garbage collection: Number of loads of garbage removed to dump. Number of loads of garbage removed to dump. Total number of cans of garbage emptied. Buildings: Number of buildings inspected. Number of plans for new buildings approved. Number of permits issued for repairs to old buildings. Total number of building permits issued. Number of buildings condemned. Number of buildings condemned. Number of buildings condemned.	9,547 217 84 59 1,014 17 4,156 9,561 42,171 4,874 21 66 87 142
Water containers treated. Mosquito breeding places found (stegomyia 130). Fly breeding places found. Flies trapped, quarts (13,000 per quart). Number of rak killed. Number of room disinfections. Garbage collection: Number of loads of garbage removed to dump. Number of cubic yards of garbage removed to dump. Total number of cans of garbage emptied. Buildings: Number of buildings inspected. Number of plans for new buildings approved Number of permits issued for repairs to old buildings. Total number of building permits issued. Number of buildings condemned. Number of buildings demolished (stables 0). Number of subles condemned.	9,547 217 84 59 1,014 17 4,156 9,561 42,171 4,874 21 66 87
Water containers treated Mosquito breeding places found (stegomyia 130) Fly breeding places found Flies trapped, quarts (13,000 per quart) Number of rats killed Number of room disinfections Garbage collection: Number of loads of garbage removed to dump Number of cubic yards of garbage removed to dump Total number of cans of garbage emptied Buildings: Number of buildings inspected Number of plans for new buildings approved Number of plans for rew buildings approved Number of permits issued for repairs to old buildings. Total number of buildings condemned Number of buildings condemned Number of stables condemned Number of stables condemned. Street cleaning:	9,547 217 84 59 1,014 17 4,156 9,561 42,171 4,874 21 66 87 14
Water containers treated. Mosquito breeding places found (stegomyia 130). Fly breeding places found. Flies trapped, quarts (13,000 per quart). Number of rats killed. Number of room disinfections. Garbage collection: Number of loads of garbage removed to dump. Number of cubic yards of garbage removed to dump. Total number of cans of garbage emptied. Buildings: Number of buildings inspected. Number of plans for new buildings approved Number of permits issued for repairs to old buildings. Total number of buildings condemned. Number of buildings condemned. Number of buildings demolished (stables 0). Number of stables condemned. Street cleaning: Average number of square vards of streets cleaned daily.	9,547 217 84 59 1,014 17 4,156 9,561 42,171 4,874 21 66 87 14 2 5
Water containers treated Mosquito breeding places found (stegomyia 130). Fly breeding places found . Flies trapped, quarts (13,000 per quart). Number of rats killed. Number of room disinfections Garbage collection: Number of loads of garbage removed to dump. Number of loads of garbage removed to dump. Total number of cubic yards of garbage removed to dump. Total number of cans of garbage emptied. Buildings: Number of buildings inspected. Number of plans for new buildings approved Number of pennits issued for repairs to old buildings. Total number of building permits issued. Number of buildings condemned. Number of buildings demolished (stables 0). Number of stables condemned. Street cleaning: Average number of square yards of streets cleaned daily.	9,547 217 84 59 1,014 17 4,156 9,561 42,171 4,874 21 66 67 14 25 5
Water containers treated Mosquito breeding places found (stegomyia 130). Fly breeding places found . Flies trapped, quarts (13,000 per quart). Number of rats killed. Number of room disinfections Garbage collection: Number of loads of garbage removed to dump. Number of loads of garbage removed to dump. Total number of cubic yards of garbage removed to dump. Total number of cans of garbage emptied. Buildings: Number of buildings inspected. Number of plans for new buildings approved Number of pennits issued for repairs to old buildings. Total number of building permits issued. Number of buildings condemned. Number of buildings demolished (stables 0). Number of stables condemned. Street cleaning: Average number of square yards of streets cleaned daily.	9,547 217 84 59 1,014 17 4,156 9,561 42,171 4,874 21 66 67 14 25 5
Water containers treated. Mosquito breeding places found (stegomyia 130). Fly breeding places found. Flies trapped, quarts (13,000 per quart). Number of rats killed. Number of room disinfections. Garbage collection: Number of loads of garbage removed to dump. Number of cubic yards of garbage removed to dump. Total number of cans of garbage emptied. Buildings: Number of buildings inspected. Number of plans for new buildings approved Number of permits issued for repairs to old buildings. Total number of buildings condemned. Number of buildings demolished (stables 0). Number of buildings demolished (stables 0). Number of stables condemned. Street cleaning: Average number of square yards of streets cleaned daily. Average number of square yards sprinkled daily. Number of private properties cleaned. Number of private properties cleaned.	9,547 217 84 59 1,014 17 4,156 9,561 42,171 4,874 21 66 67 14 25 5
Water containers treated. Mosquito breeding places found (stegomyia 130). Fly breeding places found. Flies trapped, quarts (13,000 per quart). Number of rats killed. Number of room disinfections. Garbage collection: Number of loads of garbage removed to dump. Number of cubic yards of garbage removed to dump. Number of cubic yards of garbage removed to dump. Total number of cans of garbage emptied. Buildings: Number of buildings inspected. Number of plans for new buildings approved. Number of permits issued for repairs to old buildings. Total number of buildings empties to old buildings. Total number of buildings permits issued. Number of buildings condemned. Number of buildings demolished (stables 0). Number of stables condemned. Street cleaning: Average number of square yards of streets cleaned daily. Average number of square yards sprinkled daily. Number of private properties cleaned. Number of notices served and nuisances abated.	9,547 217 84 59 1,014 17 4,156 9,561 42,171 4,874 21 66 87 14 12 2 5 600,000 90,000 4 400
Water containers treated. Mosquito breeding places found (stegomyia 130). Fly breeding places found. Flies trapped, quarts (13,000 per quart). Number of rats killed. Number of room disinfections. Garbage collection: Number of loads of garbage removed to dump. Number of cubic yards of garbage removed to dump. Number of cubic yards of garbage removed to dump. Total number of cans of garbage emptied. Buildings: Number of buildings inspected. Number of plans for new buildings approved. Number of permits issued for repairs to old buildings. Total number of buildings empties to old buildings. Total number of buildings permits issued. Number of buildings condemned. Number of buildings demolished (stables 0). Number of stables condemned. Street cleaning: Average number of square yards of streets cleaned daily. Average number of square yards sprinkled daily. Number of private properties cleaned. Number of notices served and nuisances abated.	9,547 217 84 59 1,014 17 4,156 9,561 42,171 4,874 21 66 87 14 12 2 5 600,000 90,000 4 400
Water containers treated Mosquito breeding places found (stegomyia 130). Fly breeding places found . Flies trapped, quarts (13,000 per quart). Number of rats killed. Number of room disinfections Garbage collection: Number of loads of garbage removed to dump. Number of cubic yards of garbage removed to dump. Total number of cans of garbage emptied. Buildings: Number of buildings inspected. Number of plans for new buildings approved Number of plans for new buildings approved Number of buildings dor repairs to old buildings. Total number of building permits issued. Number of buildings condemned. Number of buildings demolished (stables 0). Number of stables condemned. Street cleaning: Average number of square yards of streets cleaned daily. Average number of square yards sprinkled daily. Number of private properties cleaned. Number of notices served and nuisances abated. Cementing tree cavities: Total number of trees treated in entire city. 'Approximate number of holes ("containers") closed.	9,547 217 84 59 1,014 17 4,156 9,561 42,171 4,874 21 66 87 14 2 5 600,000 90,000 90,000 1,611 4,108
Water containers treated. Mosquito breeding places found (stegomyia 130). Fly breeding places found. Flies trapped, quarts (13,000 per quart). Number of rats killed. Number of room disinfections. Garbage collection: Number of loads of garbage removed to dump. Number of cubic yards of garbage removed to dump. Total number of cans of garbage emptied. Buildings: Number of buildings inspected. Number of plans for new buildings approved Number of permits issued for repairs to old buildings. Total number of buildings condemned. Number of buildings demolished (stables 0). Number of buildings demolished (stables 0). Number of stables condemned. Street cleaning: Average number of square yards of streets cleaned daily. Average number of square yards sprinkled daily. Number of private properties cleaned. Number of private properties cleaned.	9,547 217 84 59 1,014 17 4,156 9,561 42,171 4,874 21 66 87 14 12 2 5 600,000 90,000 4 400

MONTHLY WORK REPORT FOR COLON AND CRISTOBAL AND MOUNT HOPE.

Sanitation, Colon-Cristobal:	
Square yards street cleaned. Square yards street sprin'.led. Square yards alleys maintained.	3,895,800
Square yards street sprin led	705,600
Square yards alleys maintained	624,000
	667
Number of rats caught Number of dogs caught	195
Number of dogs Caught.	178
Number of dogs killed Loads of yard garbage disposed of Number of cans, garbage (cubic yards 2,305)	142
Number of cone gerbage (ouble words 2 205)	585
Colon dump maintained.	65, 113
Linear yards ditches maintained	95
Linear yards ditches maintained	90
Colon	0
Quarantine station.	3
Quarantine station	30
Parkway and E Street maintained.	00
Square yards oiled Number of receptacles treated Number of mosquito breeding places destroyed	28, 275
Number of receptacles treated	47,470
Number of mosquito breeding places destroyed	7
Number of hy breeding places destroyed	27
Number of buildings inspected. Gallons of larvacide used in Colon.	10,315
Gallons of larvacide used in Colon	59^{3}
Gallons of crude oil used in Colon	468
Number of nuisances abated	315
Building, Colon: Number of building plans approved. Number of parmits to accurate issued.	
Number of building plans approved.	.7
	16
Number of permits to repair issued. Number of bills collected.	25
Number of birds collected.	188
Sewers, Colon: Number of new connections made during the month	11
Total number of connections made to date.	1 200
Number of houses in which connections were made	1,290
Outstanding permits	7 72
Sanitation, Cristobal:	12
Number of cans, garbage (cubic yards 685)	13,942
Carrana wanda of anading on fill of Carran Diand	F 000
Loads of vard garbage handled	218
Loads of yard garbage handled Acres of vegetation removed Square yards oiled. Number of receptacles treated. Number of mosquito breeding places destroyed. Number of fly breeding places destroyed. Gallors of grade oil used	3
Square yards oiled	$4,52\overline{5}$
Number of receptacles treated	7,600
Number of mosquito breeding places destroyed	1
Number of fly breeding places destroyed	2
	104
Gallons of larvacide used	61
Number of buildings inspected.	1,020
Number of nuisances abated	43
Sanitation, Mount Hope:	
Number of cans, garbage (124 cubic yards)	1,361
Square yards oiled. Number of receptacles treated. Number of mosquito breeding places destroyed.	66,200
Number of receptacies treated	7,450 24 0
Number of fly breeding places destroyed	0
Number of mosquitoes caught in barracks—	U
Anopheles	119
Culex	219
Gallons of larvacide used	41
Gallons of crude oil used.	181
Gallons of crude oil used	
Linear wards of ditches constructed	0
Linear yards of ditches maintained	13,887
Linear yards of ditches maintained Square yards of vegetation removed	181,290
Number of burials during month	54

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TABLE XVIII.—CONSOLIDATED REPORT OF QUARANTINE TO ACTIONS AT THE PORTS OF BALBOA-PANAMA AND CORISTOBAL.	
Number of vessels inspected and passed Number of vessels held in quarantine.	146 10
Total number of vessels entered	156
Number of special inspections made to enforce compliance with anti- plague and mosquito-breeding regulations	. 116
Number of vessels fumigated on arrival. Number of vessels fumigated on departure.	11 3
	14
Number of crew examined	10,490 3,577
	14,067
Number of supplementary inspections Number of stowaways inspected.	1,047 5
Number of stowaways inspected. Number of persons vaccinated at port of arrival because of compulsory-vaccination law. Number of persons vaccinated at port of departure or en route because of	270
compulsory-vaccination law	1,361
Number of persons held in quarantine at the detention houses to complete period of incubation of yellow fever and bubonic plague	391
of incubation of yellow fever and plague	1,306
Total number of persons held under observation	1,697
Total number of persons landed from foreign ports: Cabin. Steerage.	1,523 1,367
	2,890
Total number of persons embarked for foreign ports:	
CabinSteerage	1,753 1,177
	2,930
Total number of persons arriving from coast towns on small launches and sailing craft Total number of persons sailing for coast towns on small launches and	2,163
sailing craft	1,559
	604
Apparent decrease for month from foreign ports: Cabin Steerage	230 190
Net decrease for month	40
Number of persons rejected and deported	22 159
Number of persons rejected and deported. Number of bills of health issued or viséed. Number of inspections of docks. Number of inspections of vessels at docks. Total number of persons landed. Less number for Pacific ports. 196	23 101
Total number of persons sailing.	4, 857 4, 489

Total apparent increase for month......

IMMIGRATION REPORT FOR COLON AND CRISTOBAL.

From—		Steerage.
Europe	11	
United States	506	58
Jamaica and West Indies	96	33
Venezuela		5
Juba		2
Costa Rica	191	20
Bocas del Toro	59	13-
Coast towns		165
Total	1,042	1,33
Grand total Men Women Children United States troops Unclassified		873 533 222 56
Quarantine, Bocas del Toro.		2,37
Vessels inspected and passed		1
Number of crew inspected and passed		1,24 17
Passengers in transit, inspected and passed		11
No quarantinable disease has appeared in this port, and the port and surrounding territory continue good.	e health co	nditions o

TABLE XIX.—STATEMENT OF QUININE ISSUED.

Quinine sulphate. kilos 18.50 Pounds avoirdupois. 47.87	
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TABLE XX.-PERSONNEL REPORT.

	April, 1916.			March.	April,
•	Gold employees.	Silver em- ployees.	Total employees.	1916— total.	1915— total.
Chief health office	4		. 4	4	3
Medical storehouse	4	4	8	8	. 8
Quarantine division	11	34	45	43	39
Health office, Panama	11	140	151	- 150	156
Health office, Colon 1	9 10	153	163	167	140
Ancon Hospital	117	251	368	363	315
Colon Hospital	16	25	41	43	35
Santo Tomas Hospital	6		6	6	5
Palo Seco Leper Asylum	- 2	20	22	24	24
Zone sanitation	7	110	117	114	99
Hospital farm, Corozal Dispensaries:	2	56	. 58	58	49
Balboa Corozal	4	2	6	8	6
Gamboa	1		1	1	2
Gatun Naos Island	2	2	4	4	6
Paraiso	2	2	4	4	. 4
Pedro Miguel	2	1	3	3	3
Total	201	800	1,001	1,000	900

¹ Includes employees at Cristobal and Mount Hope.



